

2016 QUALIFIED PRODUCTS LIST

Edition 2016-1 (February 16, 2016)

Prepared by the:

Vermont Agency of Transportation
Research and Development Section

The following lists have been extracted from www.nepcoat.org. For the most up to date lists and testing parameters, please refer to lists A and B on this website. The lists are organized as follows:

List A: Three Coat Systems for New or Bare Steel; Inorganic Zinc Rich Primer / Epoxy or Urethane Intermediate / Aliphatic Urethane Finish

List B: Three Coat Systems for New or Bare Steel; Organic Zinc Rich Primer / Epoxy or Urethane Intermediate / Aliphatic Urethane Finish

Both lists A and B have been created for new steel or steel cleaned to white/near white quality. Please see section 513 of the "2011 Standard Specifications for Construction" for details. Systems from List A and B may be used for shop applied work, with List A systems generally providing greater performance. For field application, List B is preferred as organic zinc paints have much more forgiving application properties; however List A can also be used so long as there has been sufficient surface preparation and an increased level of care upon application is taken.

Upon the use of any product herein, the Resident Engineer is required to:

1. Verify by inspection that the material being incorporated in the project is listed on the current version of the APL. If it is not, the material or product shall be rejected.
2. Complete a form TA 556 (Project Materials Acceptance Report). The form **must** include the **exact and full product name and manufacturer**. A copy can be found in Appendix A.
3. Mail or email the TA 556 Approved Product List form to the Materials Acceptance Program -- Certification Unit of the Construction and Materials Bureau.
4. The Resident Engineer should keep a copy of form TA 556 for his/her records.

Questions regarding this list should be directed to the Research and Development Section of the Policy, Planning, and Research Bureau at (802) 828-3751.




William E. Ahearn, P.E.


Date
Research Managing Engineer



NEPCOAT Qualified Products List A

for Protective Coatings for
NEW and 100% BARE EXISTING Steel for Bridges

NTPEP			Slip	Manuf'r Coating	VOC	QPL	
System		3-COAT SYSTEM	Coef	DFT (min/max)	Tested	Accepted	
No.	Coats	TESTED AND ACCEPTED	Class	mil micron	g/L	Dates	
NEPCOAT LIST A - INORGANIC Zinc Rich Primer / Epoxy or Urethane Intermediate / Aliphatic Urethane Finish							
SSC(09)-01	SHERWIN WILLIAMS COMPANY					from	
	Primer	Zinc Clad® DOT Inorganic Zinc Rich Primer	B ¹	2-4	50-100	336	11/09/2010
	Interm	Steel Spec Epoxy Intermediate		3-6	75-150	301	until mtg.
	Topcoat	High Solids Polyurethane		3-5	75-125	281	fall 2017
	¹ Footnote	4 mils max DFT, 48 hours min cure, 4% max thinner					
SSC(12)-03*	CARBOLINE COMPANY					from	
	Primer	Carbozinc® 11 HS Inorganic Zinc Primer	B ¹	2-6	50-150	267	04/14/14
	Interm	Carboguard® 893 Epoxy Intermediate		3-6	75-150	198	until mtg.
	Topcoat	Carbothane 133 LV Aliphatic Polyurethane		3-5	75-125	245	spring 2018
	¹ Footnote	6 mils max DFT, 19 hrs min cure, 12% max thinner					
¹ Footnote Information from the Slip-Coefficient and Creep Resistance Test Certificate is given for use w/ primed bolted connections.							
NOTE 1	NEPCOAT- NORTHEAST PROTECTIVE COATINGS COMMITTEE of CT, DE, ME, MA, NH, NJ, NY, PA, RI, VT						
2	NTPEP (Nat'l Transport'n Product Evaluat'n Program). See Structural Steel Coating test data at http://data.ntpep.org .						
3	Accelerated lab and field testing of coating systems is performed according to AASHTO NTPEP R-31 criteria.						
4	Systems are accepted for use on NEW and 100% BARE EXISTING steel for bridges cleaned by abrasive blasting.						
5	SSC(yr)-xx systems comply with AASHTO R-31 Evaluation Practice & NEPCOAT Acceptance Criteria.						
6	VOC values are lab test results using unthinned samples. NEPCOAT max VOC limit is 420 g/L (3.5 lb/gal). Individual state requirements for VOC limits may differ.						
7	Recommended DFT values are listed by manufacturer (see Product Data Sheets.)						
8	Any change in coating formulation from that tested will result in removal of the system from the QPL.						
9	The full QPL term is <u>seven</u> years starting from the date of acceptance until the next biannual NEPCOAT meeting.						
*	Acceptance is <u>CONDITIONAL</u> pending submission within <u>four</u> years of successful 2-year field history. A startup list of five bridges painted with the paint system must be submitted within two years. See Acceptance Criteria.						
	Note that R-31-09 Section 12.1, Requalification Testing, has been discontinued.						
es	VOC value adjusted for exempt solvents						



NEPCOAT Qualified Products List B

for Protective Coatings for
NEW and 100% BARE EXISTING Steel for Bridges

NTPEP System No.	Coats	TESTED AND ACCEPTED	Slip Coef Class	Manuf'r Coating DFT (min/max) mil	VOC Tested g/L	QPL Accepted Dates
NEPCOAT LIST B - ORGANIC Zinc Rich Primer / Epoxy or Urethane Intermediate / Aliphatic Urethane Finish						
SSC(10)-03	PPG/AMERON					from
Primer	Amercoat® 68HS Zinc Rich Epoxy Primer	B ¹	3-5	75-125	276	12/14/2011
Interm	Amercoat® 399 Fast Drying Epoxy		4-8	100-200	177	until mtg.
Topcoat	Amercoat® 450H Gloss Aliphatic Polyurethane		2-5	50-125	306	fall 2018
¹ Footnote	3 mils max DFT, 7 days min cure, 3% vol max thin					
SSC(10)-05*	WASSER HIGH TECH COATINGS					from
Primer	MC-Zinc 100	Ø	3-5	75-125	115 es	4/03/12
Interm	MC-Miomastic 100	no	3-5	75-125	173 es	until mtg.
Topcoat	MC-Ferrox A 100	report	2-4	50-100	144 es	spring 2016
ØFootnote	No data reported.					
SSC(11)-01*	SHERWIN WILLIAMS COMPANY					from
Primer	Zinc Clad® III HS Organic Zinc Rich Epoxy Primer	B ¹	3-5	75-125	337	10/02/12
Interm	Steel Spec Epoxy Intermediate		3-8	75-200	293	until mtg.
Topcoat	Hi-Solids Polyurethane		3-5	75-125	288	fall 2016
¹ Footnote	5 mils max DFT, 7 days min cure, zero thinner					
SSC(11)-02*	INTERNATIONAL PAINT INC					from
Primer	Interzinc® 315B Epoxy Zinc Rich	B ¹	2-6	50-150	304	10/02/12
Interm	Intergard 475HS Epoxy		4-8	100-200	187	until mtg.
Topcoat	Interthane® 870 UHS		3-5	75-125	242 es	fall 2016
¹ Footnote	4 mils max DFT, 48 hours min cure, zero thinner					
(continues)	(List B continues)					
¹ Footnote	Information from the Slip-Coefficient and Creep Resistance Test Certificate is given for use w/ primed bolted connections.					
NOTE 1	NEPCOAT- NORTHEAST PROTECTIVE COATINGS COMMITTEE of CT, DE, ME, MA, NH, NJ, NY, PA, RI, VT					
2	NTPEP (Nat'l Transport'n Product Evaluat'n Program). See Structural Steel Coating test data at http://data.ntpep.org .					
3	Accelerated lab and field testing of coating systems is performed according to AASHTO NTPEP R-31 criteria.					
4	Systems are accepted for use on NEW and 100% BARE EXISTING steel for bridges cleaned by abrasive blasting.					
5	SSC(yr)-xx systems comply with AASHTO R-31 Evaluation Practice & NEPCOAT Acceptance Criteria.					
6	VOC values are lab test results using unthinned samples. NEPCOAT max VOC limit is 420 g/L (3.5 lb/gal). Individual state requirements for VOC limits may differ.					
7	Recommended DFT values are listed by manufacturer (see Product Data Sheets.)					
8	Any change in coating formulation from that tested will result in removal of the system from the QPL.					
9	The full QPL term is <u>seven</u> years starting from the date of acceptance until the next biannual NEPCOAT meeting.					
*	Acceptance is <u>CONDITIONAL</u> pending submission within <u>four</u> years of successful 2-year field history. A startup list of five bridges painted with the paint system must be submitted within two years. See Acceptance Criteria.					
	Note that R-31-09 Section 12.1, Requalification Testing, has been discontinued.					
es	VOC value adjusted for exempt solvents					



NEPCOAT Qualified Products List B

for Protective Coatings for
NEW and 100% BARE EXISTING Steel for Bridges

NTPEP			Slip	Manuf'r Coating		VOC	QPL
System			Coef	DFT (min/max)		Tested	Accepted
No.	Coats	TESTED AND ACCEPTED	Class	mil	micron	g/L	Dates
NEPCOAT LIST B - ORGANIC Zinc Rich Primer / Epoxy or Urethane Intermediate / Aliphatic Urethane Finish							
SSC(04)-03	SHERWIN WILLIAMS COMPANY						from
SSC(11)-03	Primer	Zinc Clad® III HS Organic Zinc Rich Epoxy Primer	B ¹	3-5	75-125	329	10/02/12
	Interm	Macropoxy® 646 Fast Cure Epoxy		3-10	75-250	238	until mtg.
	Topcoat	Acrolon™ 218 HS Acrylic Polyurethane		3-6	75-150	263	fall 2016
	¹ Footnote	5 mils max DFT, 7 days min cure, zero thinner					
SSC(12)-04*	CARBOLINE COMPANY						from
	Primer	Carbozinc® 859 Organic Zinc Rich Epoxy Primer	B ¹	3-10	75-250	322	04/14/14
	Interm	Carboguard® 893 Epoxy Intermediate		3-6	75-150	207	until mtg.
	Topcoat	Carbothane 133 VOC Aliphatic Polyurethane		3-5	76-127	185 es	spring 2018
	¹ Footnote	6 mils max DFT, 4 days min cure, 10% vol max thin					
¹ Footnote	Information from the Slip-Coefficient and Creep Resistance Test Certificate is given for use w/ primed bolted connections.						
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*	Acceptance is CONDITIONAL pending submission within <u>four</u> years of successful 2-year field history. A startup list of five bridges painted with the paint system must be submitted within two years. See Acceptance Criteria.						
	Note that R-31-09 Section 12.1, Requalification Testing, has been discontinued.						
es	VOC value adjusted for exempt solvents						

State of Vermont
AGENCY OF TRANSPORTATION
CONSTRUCTION & MATERIALS BUREAU
PROJECT MATERIALS ACCEPTANCE REPORT

Project Name:

Project Number:

The following materials covered by the Agency's "Approved Products List", were inspected and authorized for use on the above project.

Project

Line No.

Item No. & Name:

Product Name:

Quantity:

Manufacturer/Supplier:

Additional Information:

Date: _____

Submitted by:

Resident Engineer

cc: Resident Engineer project file
Regional project file
AOT.MaterialsCertifications@vermont.gov